

# ***Headquarters U.S. Air Force***

---

*Integrity - Service - Excellence*

## **Former Williams AFB Restoration Advisory Board (RAB)**



**February 23, 2010**

**Highland High School  
4301 E. Guadalupe Rd.  
Gilbert, AZ**

# ***Headquarters U.S. Air Force***

---

*Integrity - Service - Excellence*

## **Welcome & Introductions**



Presented by:  
Mr. Bill Lopp & Mr. Len Fuchs,  
RAB Community Co-Chairmen



## ***Welcome & Introductions***

---

- **Mr. Len Fuchs, RAB Community Co-Chair**
- **Mr. Bill Lopp, Air Force Center for Engineering & the Environment, Base Realignment & Closure Environmental Coordinator (BEC) and RAB Co-Chair**
- **Ms. Carolyn d'Almeida, Project Manager, U.S. Environmental Protection Agency, Region IX**
- **Mr. Andre Chiaradia, Project Manager, ADEQ**



# Agenda

---

<u>Time</u>	<u>Topic</u>	<u>Presenter</u>
7:00 p.m.	<b>RAB meeting convenes</b> <ul style="list-style-type: none"><li>• Welcome and introductions</li><li>• Community Co-chair remarks</li><li>• Adopt November 2009 minutes</li><li>• Action Items</li></ul>	<b>Mr. Bill Lopp</b> <b>Mr. Len Fuchs</b>  <b>Ms. Amber Cargile</b>
7:15 p.m.	<b>Program Updates</b> <ul style="list-style-type: none"><li>• Environmental Updates</li><li>• Contracting Updates</li><li>• Property Transfer Update</li></ul>	<b>Mr. Bill Lopp</b> <b>Mr. Jay Harbin</b> <b>Mr. Ed Mears</b>
8:00 p.m.	<b>Landfill (LF004) Presentation</b>	<b>Mr. Jay Harbin</b>
8:30 p.m.	<b>Meeting wrap-up</b> <ul style="list-style-type: none"><li>• Review action items for next meeting</li><li>• Call for agenda items for next meeting</li><li>• Propose next RAB meeting date: May 18, 2010</li></ul>	<b>Mr. Bill Lopp</b> <b>Mr. Len Fuchs</b>
9:00 p.m.	<b>Adjourn</b>	<b>Mr. Bill Lopp</b> <b>Mr. Len Fuchs</b>

---



## ***Adopt Meeting Minutes***

---

- **Review and adopt November 2009 RAB meeting minutes**

Presented by:  
Mr. Len Fuchs  
RAB Community Co-Chairmen



## ***Action Items From Last Meeting***

---

- 1. Present a Site ST012 Passive Flux Meter Test discussion**
  - This is discussed later in the presentation
- 2. Provide the date that site ST035 tanks were removed and discuss how MTBE is being addressed**
  - The USTs, dispenser island, and ancillary piping at the Former Bldg 760 site were removed from the ground in Oct 1993
  - Currently groundwater (GW) monitoring is performed at this. In Spring 2010, soil vapor extraction will commence. SVE is a proven technology to address both MTBE and BTEX
- 3. Discuss the Conceptual Site Model (CSM) at the landfill and the impact of rising GW at the site**
  - A Special Presentation has been prepared that discusses the CSM and rising GW at LF004
- 4. Provide basewide plume diagrams**
  - A basewide figure and plume maps are provided as handouts

# ***Headquarters U.S. Air Force***

---

*Integrity - Service - Excellence*

## **Program Updates:**

**Sites ST012, ST035, & LF004;  
Parcel N Debris Area (PNDA);  
and Temporary Treatment  
Facility (TTF)**

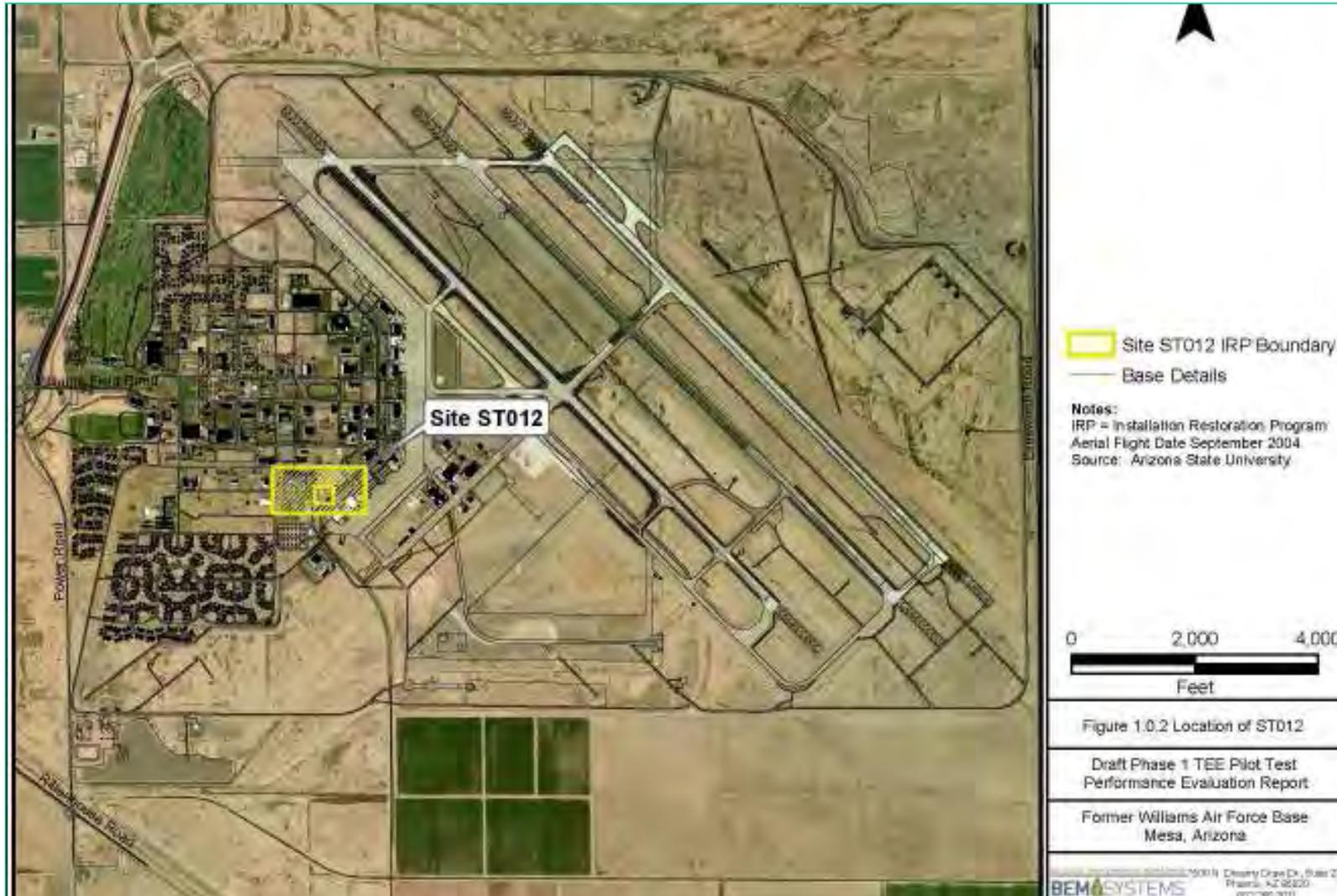


Presented by:  
Mr. Bill Lopp, Former Williams AFB BEC;  
Mr. Jay B. Harbin, URS Corp; and  
Mr. Ed Mears, BEM Systems



# Site ST012 Update

## Site Location





## ***ST012 Groundwater Sampling Update***

---

- **Air Force (AF) completed ST012 annual sampling in Nov 2009.**
- **AF is currently reviewing Annual GW Monitoring Report**
- **Draft Report submittal is expected in Mar 2010**



# ST012 Groundwater Sampling Update Nov 2009 Benzene Contours





## **Site ST012 Update Thermal Enhanced Extraction (TEE) Pilot**

---

<b>Event</b>	<b>Schedule</b>
Test Steps 1 – 5	Aug 2008 – May 2009
Post-Test Cooling	May – Oct 2009
Post Test GW Monitoring	Nov 2009 – Jan 2010
Post Test Passive Flux Meters	Nov 2009
Post Test Soil Borings	Nov – Dec 2009
Draft TEE Report to ADEQ and EPA	Jun 2010
Final TEE Report	Nov 2010



## ***Site ST012 Update Thermal Enhanced Extraction (TEE) Pilot***

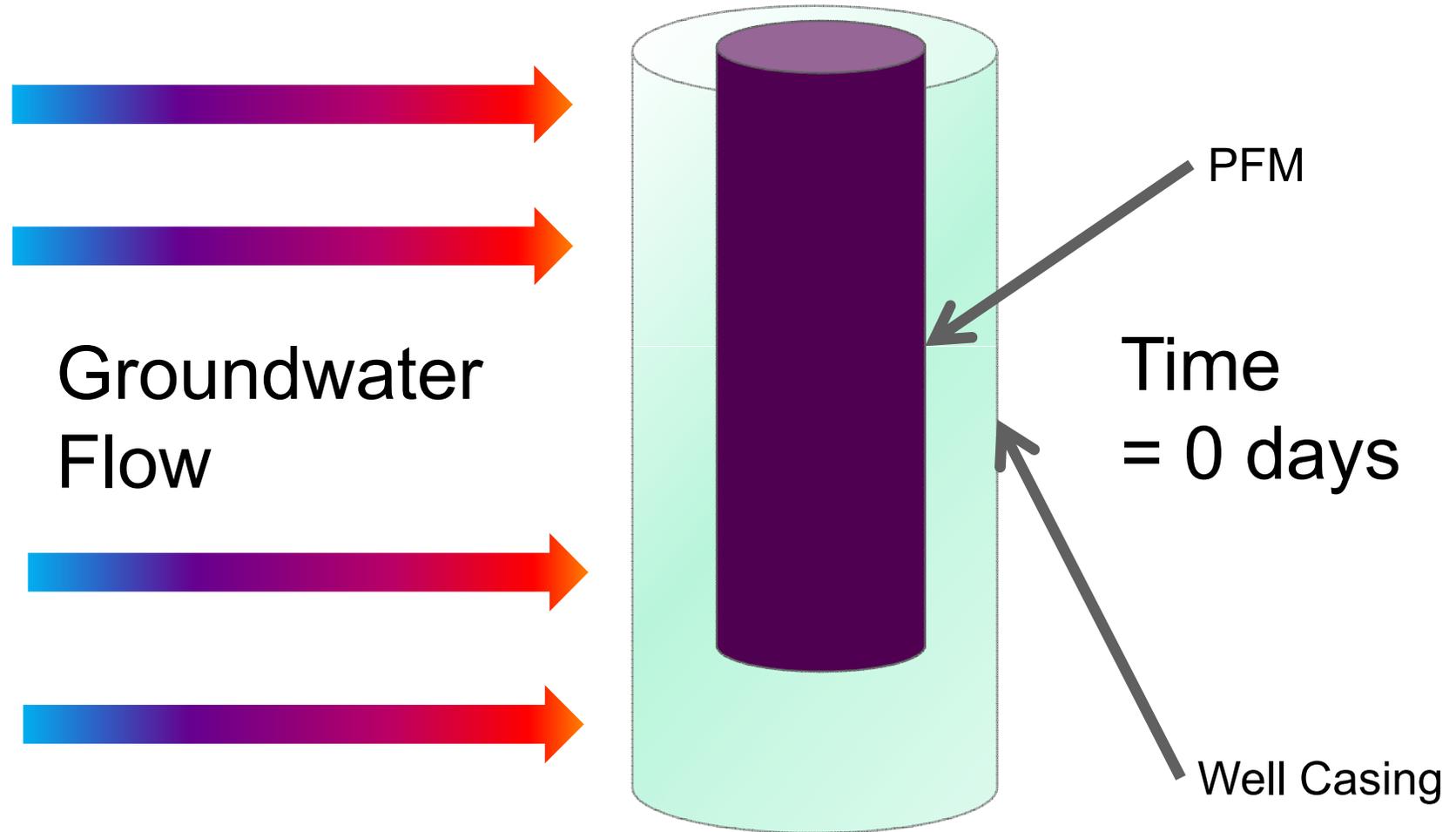
---

- ***Contaminant mass flux*** – the mass of a contaminant like benzene that moves through an imaginary “window” in a given period of time – has units like pounds per square inch per day
- **Passive Flux Meters (PFMs)** are clean “socks filled with carbon granules” that capture the benzene dissolved in water moving through the socks
- **Purpose:** Compare mass flux before and after steam treatment as one way to evaluate the effectiveness of TEE
- **Method**
  - Inject Clean Water in the center of the test cell
  - Deploy, retrieve, and analyze PFMs
  - Conduct these tests both before and after the steam injection



# Site ST012 Update

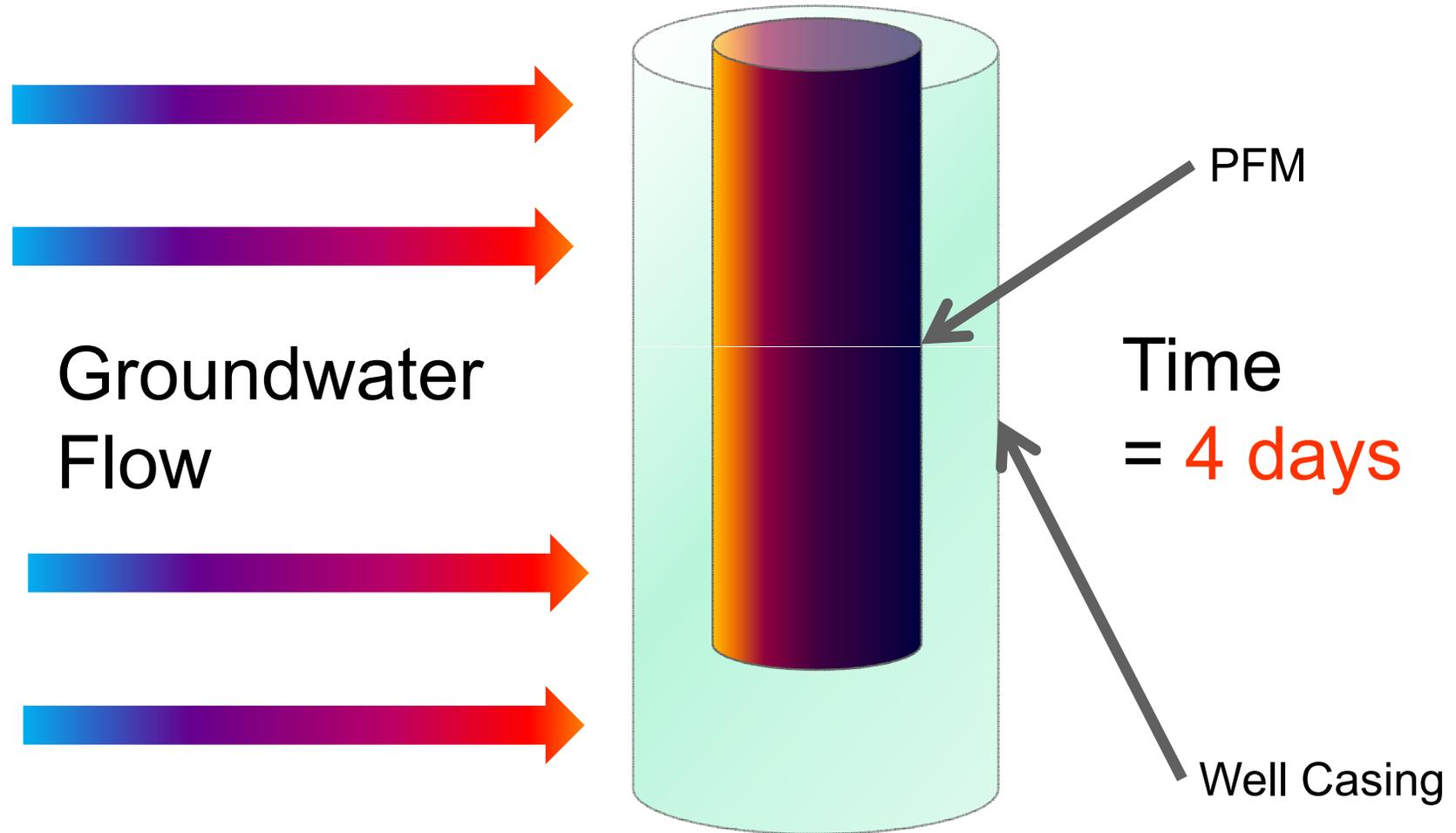
## Thermal Enhanced Extraction (TEE) Pilot





# Site ST012 Update

## Thermal Enhanced Extraction (TEE) Pilot





# Site ST012 Update

## Groundwater Monitoring Well Replacement

- Install
  - 9 Wells – Dec 2009 – Jan 2010
  - 3 Wells – Mar 2010
- Abandon 12 wells – Jan & Mar 2010





# Site ST012 Update

## Groundwater Monitoring Well Replacement



*Integrity - Service - Excellence*





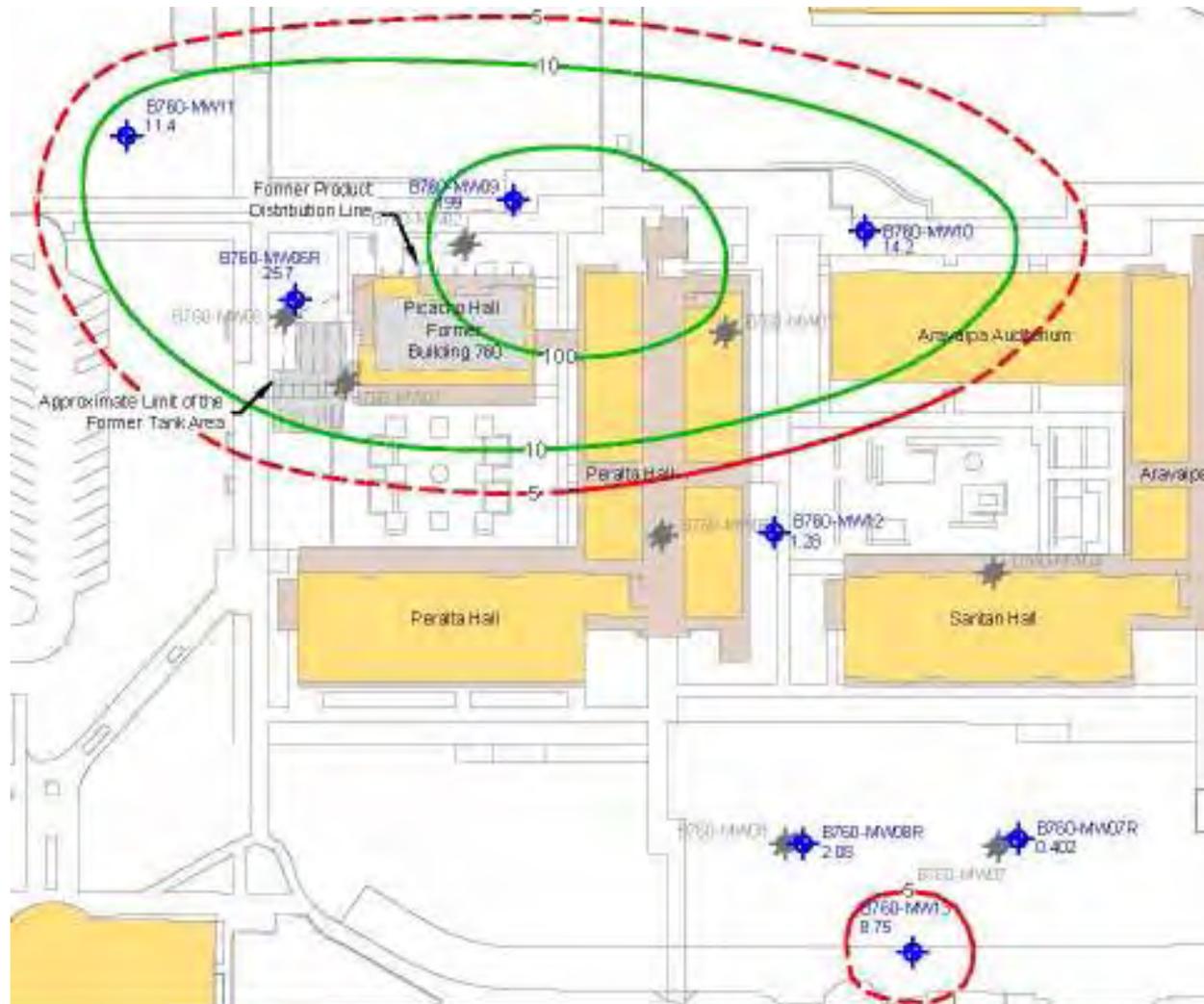
## ***ST035 (Former Building 760) Groundwater Sampling Update***

---

- **AF completed ST035 annual sampling in Dec 2009**
- **AF is currently reviewing Annual GW Monitoring Report**
- **Draft Report submittal is expected in Mar 2010**



# ST035 Groundwater Sampling Update Dec 2009 Benzene Contours



*Integrity - Service - Excellence*



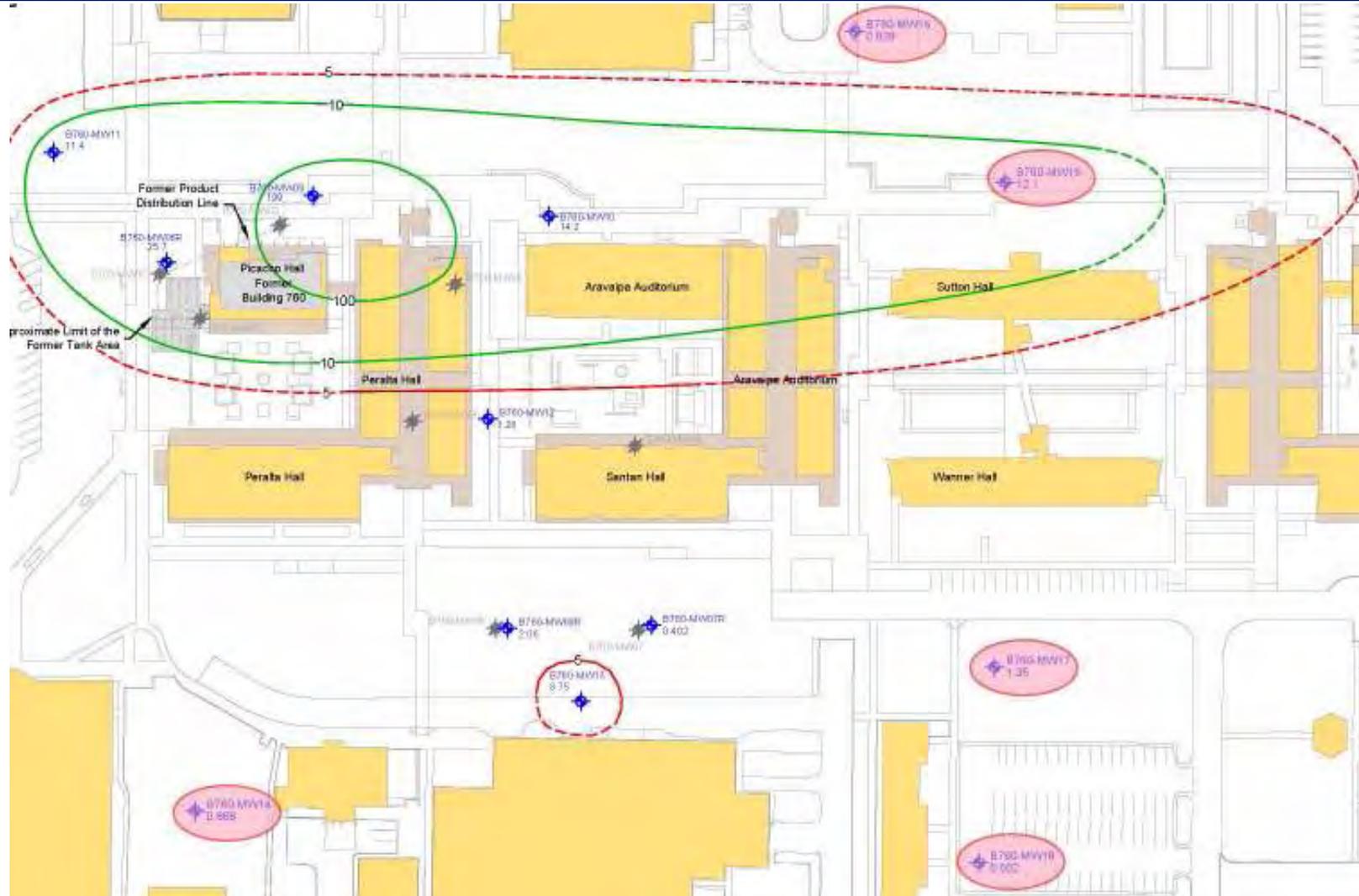
## ***ST035 GW Monitoring Well Installation Update***

---

- **AF installed five additional GW monitoring wells  
Nov 2009**
- **These wells were sampled in Dec 2009**
- **Analytical results and well construction  
documentation will be submitted in late Spring  
2010**



# ST035 (Former Building 760) New GW Monitoring Wells





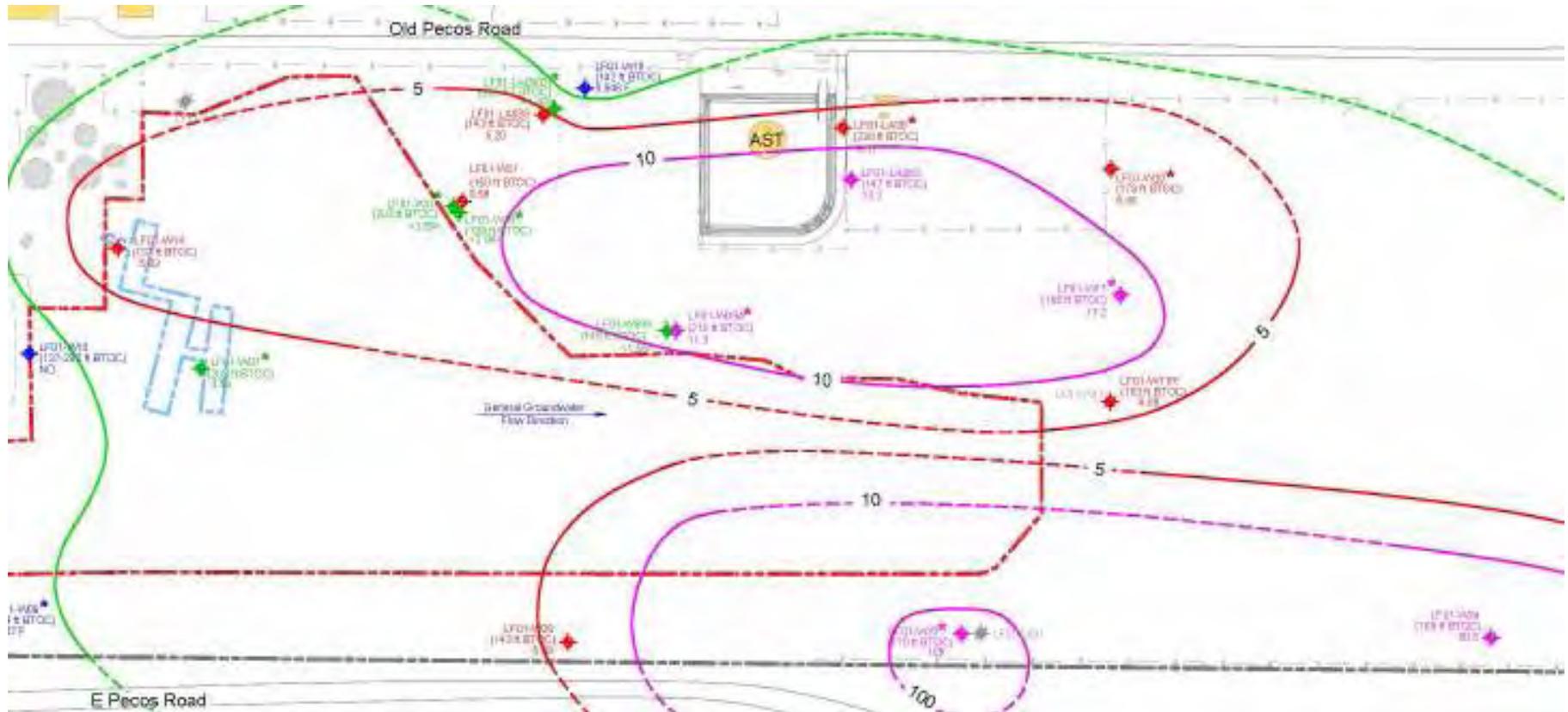
## ***Landfill Site LF004 Update***

---

- **AF completed LF004 annual sampling in Nov 2009**
- **AF currently reviewing GW Monitoring Report – Draft Report submittal Mar 2010**
- **AF completed LF004 annual landfill cap O&M – Draft O&M report submittal Apr 2010**
- **AF currently reviewing the Remedial Investigation/ Feasibility Study (RI/FS) – Draft RI/FS Mar 2010**

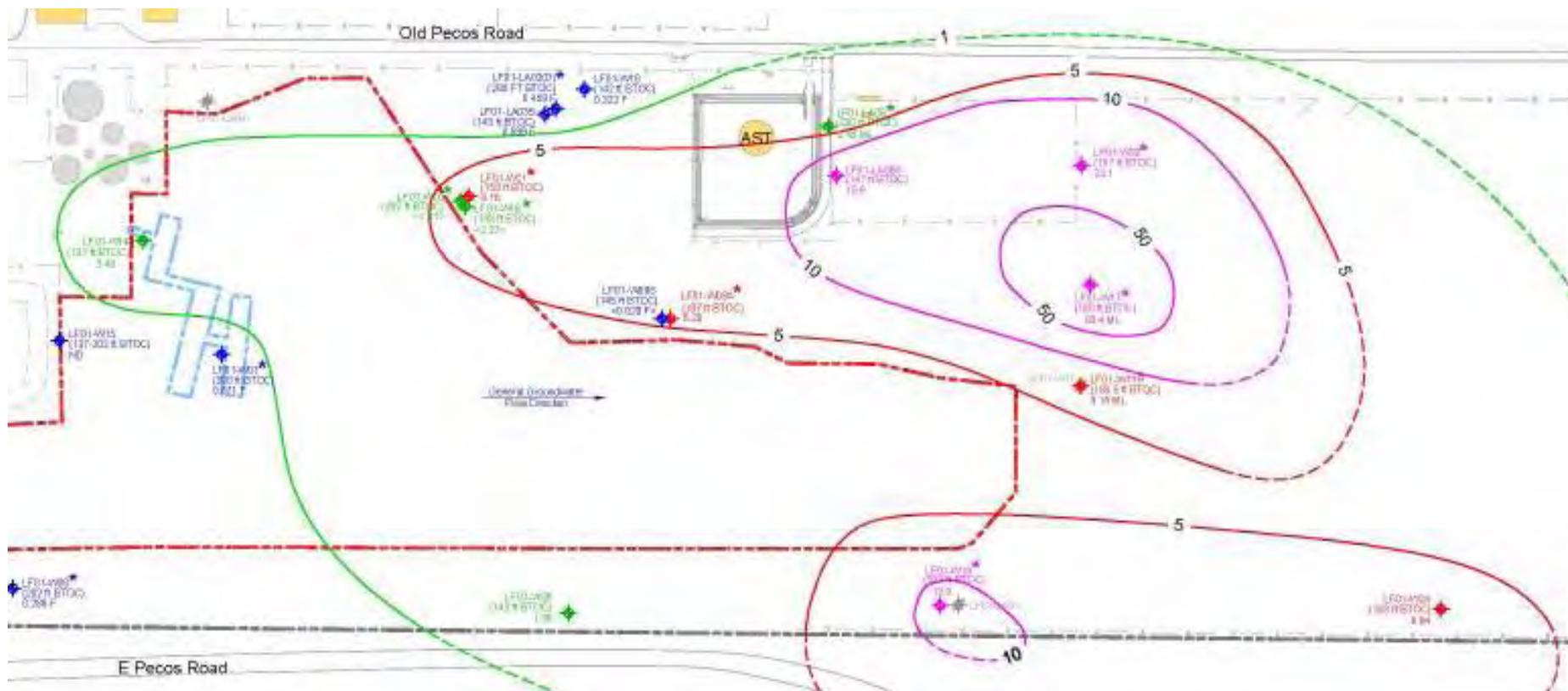


# Landfill Site LF004 Update Nov 2009 PCE Results





# Landfill Site LF004 Update Nov 2009 TCE Results





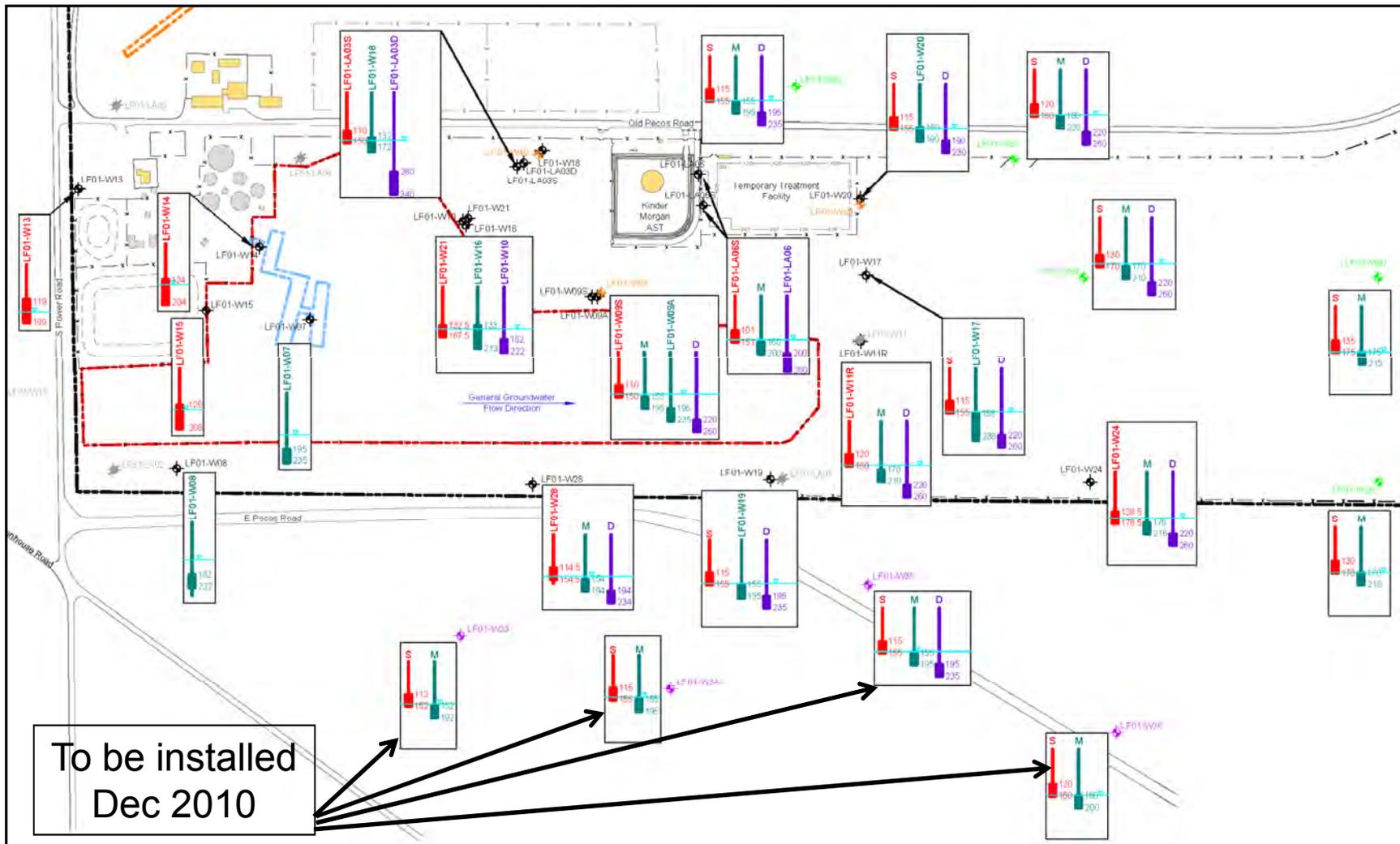
## ***LF004 MW Installation Update***

---

- **AF installed 28 additional monitoring wells Jul-Nov 2009**
- **Sampled in Dec 2009**
- **AF also conducted an aquifer step test and constant-rate pump test.**
- **Analytical results, well construction documentation, and aquifer test results will be submitted in late Spring 2010**



# LF004 Optimized Groundwater Monitoring Network





## ***Parcel N Debris Area (PNDA) Site Inspection***

---

<b>Activity</b>	<b>Scheduled</b>
Explosive Safety Plan Approved by DoD Explosives Safety Board	Feb 2010 (Complete)
Draft PNDA Site Inspection Work Plan	Currently under AF Review
Rights of Entry to offsite properties	Currently being worked by ACOE
Start Fieldwork	May 2010



## ***Temporary Treatment Facility (TTF)***

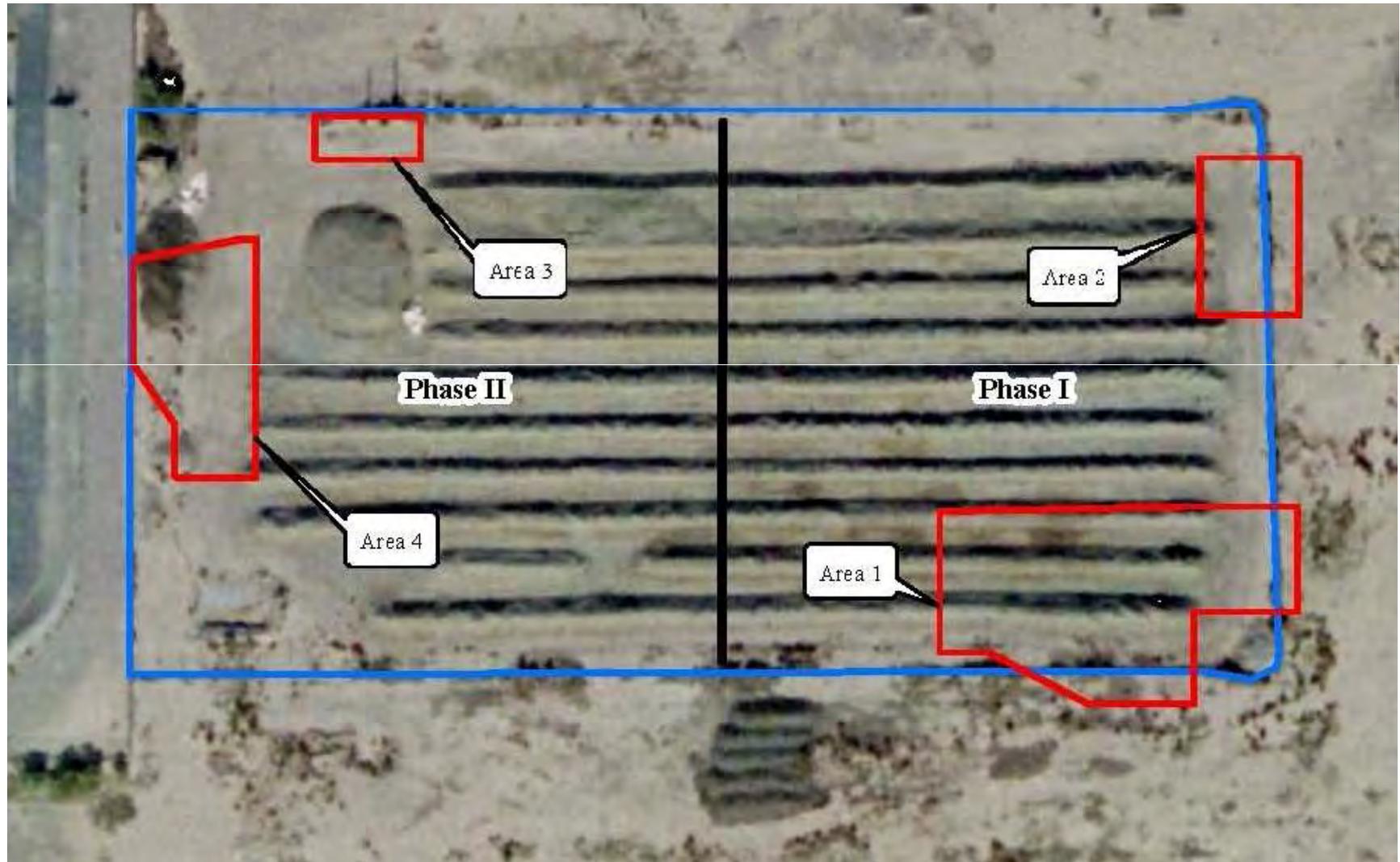
---

- TTF used to treat dieldrin contaminated soil from Site SS017 (Old Pesticide and Paint Shop)
- Treated soil removed in Nov 2007 and confirmation samples collected
- Four areas remained above Arizona Residential Soil Remediation Levels (RSRLs) for dieldrin

<b>Activity</b>	<b>Schedule</b>
Excavation/disposal of 900 cubic yards of non-hazardous soil and backfill	22 - 26 Feb 2010
Draft TTF Over-Excavation Completion Report	Mar 2010
Final Report	Jun 2010



## *TTF Excavation Areas*



*Integrity - Service - Excellence*

# ***Headquarters U.S. Air Force***

---

*Integrity - Service - Excellence*

## **FY2010 Contracting Update**



Presented by:  
Mr. Bill Lopp,  
Former Williams AFB BEC



## ***FY2010 Contracting Update***

---

### **■ *Site ST012:***

- *Install 3 new wells, abandon 8 wells*
- *Recommend Long Term Monitoring (LTM) optimization and Prepare the 2011 LTM Work Plan*

### **■ *Sites LF004, SS017 and ST035:***

- *Install 9 new wells at LF004*
- *Recommend LTM optimization and Prepare the 2011 LTM Work Plan for each site*
- *Complete the OU6 Proposed Plan and Record of Decision*

### **■ *Basewide LTM and remedial system operations:***

- *Conduct LTM at sites LF004, ST012, SS017, and ST035*
- *Conduct SVE operations at sites ST012 and ST035*
- *Conduct landfill cap O&M at LF004*

# ***Headquarters U.S. Air Force***

---

*Integrity - Service - Excellence*

## **Property Transfer Update**



Presented by:  
Mr. Bill Lopp,  
Former Williams AFB BEC



# Property Transfer Update





# Landfill (LF004) Presentation

Presented by:  
Mr. Jay B. Harbin,  
URS Corporation

# ***Headquarters U.S. Air Force***

---

*Integrity - Service - Excellence*

## **Action Items**



Presented by:  
Ms. Amber Cargile,  
Cargile Communications

# ***Headquarters U.S. Air Force***

---

*Integrity - Service - Excellence*

## **Meeting Wrap-Up**



Presented by:  
Mr. Bill Lopp & Mr. Len Fuchs,  
RAB Community Co-Chairmen



## ***Meeting Wrap-Up***

---

- **Propose agenda items for next RAB meeting**
- **Schedule next RAB meeting (18 May 2010)**
- **Meeting adjourned**